1892.]

occasionally they are found at the bottom of the tree. Though fagi is a strong flyer, it does not appear to often go far from its birthplace. The more lethargic female keeps the males near home. From its habit of assembling, where one moth is found others are generally near the spot. Sometimes I have taken four or five specimens from one small tree, or eight or ten on a group of young trees close together. The moths do not all emerge at one time. The first was taken this year on May 12th; I found three to-day, July 6th, and they were to be had by searching any day between those dates, most plentifully the first week in June. Where a moth is taken to-day, if no others are then to be found, search the spot again to-morrow, and often three or four others will be there. I have several times found a beautiful freshlyemerged specimen on the same tree I had found one on about a month before. With the search confined mostly to the young trees, the concentration of the broods, the assembling habits, the succession of emergences, and the partial second brood in October, this species should not be hard to obtain.

Reading: July, 1892.

NOTES ON SOME BRITISH AND EXOTIC COCCIDÆ (No. 23).

BY J. W. DOUGLAS, F.E.S.

## PLATE III.

## PROSOPOPHORA, n. g.

Q adult. Scale wholly waxen, base closed; surface with granulose raised lines; no anal cleft or tubercles, anal orifice close to the margin; margin entire, no fringe. Antennæ of eight joints. Mentum monomerous. Legs atrophied. Anal ring with ten hairs. Last segment of the body deeply emarginate, with its lateral lobes not, or scarcely, extending beyond the line of the circumference.

 ${\mathcal S}$  adult. Scale of the same material and pattern as the  ${\mathcal Q}\,;$  antennæ of ten joints.

## Prosopophora dendrobii, n. sp.

Q adult. Scale (fig. 1) hard, dull, ashy-brown, broad-oval, slightly convex, disc with a large ring parallel to the margin, composed of large, connected granules, the space enclosed intersected lengthwise by a median carina, which extends from the anterior margin of the scale to the anal orifice, and is crossed by several (5–6) raised granulose lines, of which the posterior are often indistinct or obsolete; the wide area between the ring and the margin also crossed by similar, equidistant, straight lines (8–9 on each side of the scale). All the raised portions are whitish, and overlay pores through which the granulose matter was doubtless excreted in a spumous state; the edges of the oval anal orifice are also whitish. The waxen plate closing the base of the scale yellowish, very thin and delicate, is attached to the

208 August,

margin all round, and anteriorly has an orifice for the extrusion of the rostrum. The insect when first restored was purplish-brown in colour; when alive it had doubtless filled the scale, but in its dry state it was entirely shrivelled, and lay in the anterior region, the rest of the scale was more or less occupied by withered larvæ. Antennæ nearly cylindrical, of eight joints (fig. 1b), the relative length of them not very constant, the 5th sometimes not so long as represented, and the 8th much smaller; all are hairless except the last, which has three strong curved hairs on the apex. In a few specimens there were but six or seven joints only (figs. 1bb), the result, probably, of parasitism of the insect. Eyes small, inconspicuous. Rostrum large, filaments very long. On the under-side (fig. 1a), the body has, on the abdomen, two rows of five perforated discs (fig. 1c), and, anteriorly, three similar ones in a triangle. The deep emargination of the last segment results in a wide lateral lobe on each side, terminated by a strong hair, and bearing several long, tubular spinnerets, with orifices shaped like deer's feet (fig. 1d), and also, near the margin, some blunt spines (fig. 1e). Anal ring large, with ten hairs, above it is a dark chitinous arch or loop, which in some specimens appears detached, but is really a part of the segment (figs. 1f and 1g).

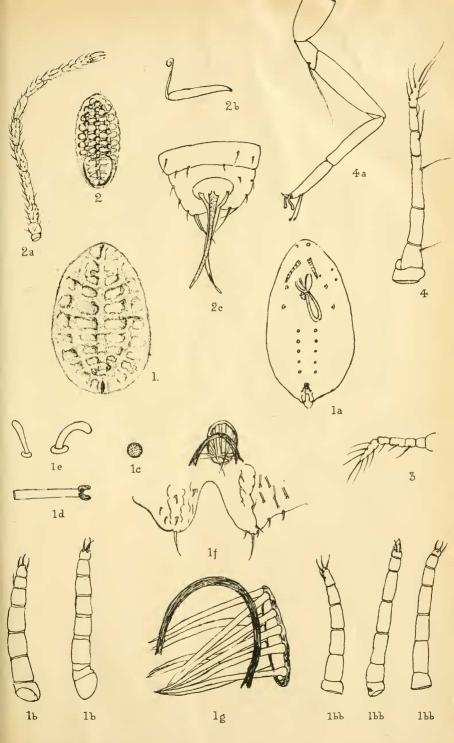
Length of scale, 3-3.5 mm.; breadth, 2.5 mm.

3 adult. Seale (fig. 2) of the same pattern as the \( \) (not thin and glossy, as in \( Lecanium \)), but the raised lines are stronger, and, posteriorly, without interruption of the pattern, the upper-side is developed in the form of an ovoid plate, which is free, except at its broad flexile base, evidently to permit the escape of the imago. The imago is too much dislocated to represent entire, the buccal ocelli are large. Antennæ (fig. 2a) of ten joints, thickly set with short, curved hairs, and three at the apex slightly clubbed. Wings ordinary; halteres (fig. 2b) terminated by a single curved hair. Legs ordinary. Fig. 2e represents the anal segment and genital armature.

Larva. Antennæ of six joints, with long hairs (fig. 3). The bodies were so broken that they could not be restored or figured.

In October, 1891, Mr. S. J. McIntire sent, as just received from Mr. Jenman, Superintendent of the Botanic Garden, George Town, Demerara, some pieces of the stems of *Dendrobium calceolaria*, to which several of these *Coccids*, dead and dry, were tightly adherent. *Prima facie* they had the appearance of *Lecanium*, but this was deceptive, for on examination they proved to have such complex characters, that they would not enter any indicated genus, and for the same reason their relationship and position in any group of *Coccidæ* are not at present possible for me to assign. The 3 scales were mostly empty, but in a few a dead imago, fully developed, remained.

The first lot of  $\mathfrak Q$  scales treated in the ordinary way, by boiling in solution of caustic potash, were entirely dissolved, showing that they were wholly cereous. Subsequent experiments with other scales, under the careful manipulation of Mr. Newstead, gave the very singular results above stated, which were constant in the many ex-



R. Newstead, del. et lith.